

The W93/Mk7 program will provide a modern warhead to the U.S. submarine launched ballistic missile fleet.

OVERVIEW

The W93 is a new program of record being established to meet requirements set by the Department of Defense. The Navy's ballistic missile submarine force is the most survivable leg of the Triad and is currently equipped with two warhead types: the W76 and W88. These warheads provide approximately two-thirds of the total U.S. deployed force. The W93 will reduce current over-reliance on the W76 system and will allow the U.S. to keep pace with future adversary threats.

All W93 key nuclear components will be based on currently deployed and/or previously tested nuclear designs, as well as extensive stockpile component and materials experience. However, the W93 will also incorporate modern technologies to improve safety, security, and flexibility to address future

threats and will be designed for ease of manufacturing, maintenance, and certification. It will also ensure the continued viability of STRATCOM's operational flexibility and effectiveness as we transition from Ohio-class submarines to a smaller fleet of Columbia-class submarines. The W93 will not require additional nuclear testing to certify.

The W93 program is vital for continuing the United States' longstanding support to the United Kingdom, which is also modernizing its nuclear forces. As an allied but independent nuclear power that contributes to NATO's nuclear deterrent posture, the UK's nuclear deterrent is critical to U.S. national security per our partnership outlined in the Mutual Defense Agreement (MDA).

ACCOMPLISHMENTS AND CURRENT STATUS

NNSA and the Navy began the Phase 1, Concept Assessment, in January 2021 to assess potential weapon design options against multiple evaluation criteria. The assessment will provide information on the current maturity of technologies and their readiness for insertion into the design and execution schedule of the program. It will also enable the development of schedule and cost estimates for further technology maturation. In addition, the program has generated an initial draft of the Phase 1 Executive Summary identifying Program Guidance and Mission Need/Definition.



CURRENT STATUS AND FUTURE MILESTONES

NNSA is planning to complete Phase 1 in the second quarter of FY 2022.

NNSA NUCLEAR SECURITY ENTERPRISE ROLES

Los Alamos National Laboratory and Sandia National Laboratories are the design and engineering labs for the W93, while multiple Nuclear Security Enterprise facilities will be responsible for other aspects of the W93 after entrance into Phase 2.